

of neon, argon, krypton and xenon, by M. H. Wilde. The author assumes, without proof, that the atomic weights of this series should be represented by the members of the series $7nH$, where n is 3, 6, or 9. This would give the atomic weights as neon, 7 (9'96); nitrogen, 14 (14); argon, 21 (19'96); krypton, 42 (40'78); and xenon, 63 (64), instead of the experimental numbers given in brackets.—On a type of compounds of glucinum, by M. H. Lacombe. The compounds are of the type A_nBe_2O , where A is the radical of a fatty acid. Particulars are given of the preparation and properties of the formate, acetate, propionate, isobutyrate, normal butyrate and isovalerate. All attempts to prepare the normal salts of the type BeA_2 were fruitless.—On the constitution of the chlorhydrins, by M. Marc Tiffeneau. The author has applied the synthesis of chlorhydrins from magnesium alkyl bromides and mono-chloracetone to determine the constitution of the chlorhydrins obtained from olefines and hypochlorous acid. The rule given by Markownikoff, that in the fixation of $HClO$ on olefines the hydroxyl group attaches itself to the carbon possessing the least hydrogen, as generalised by Krassousky was verified in the experiments described.—On the nitration of furfuran, and on a derivative of nitrosuccinic aldehyde, by M. Marquis. The nitration of furfuran in solution in acetic anhydride opens up the ring with the formation of a monacetin of nitrosuccinic aldehyde. By the action of pyridine upon this, the ring is again closed and mono-nitrofurfuran is produced.—On a new mode of preparation of oxygen, by M. George F. Jaubert. The peroxides of sodium or potassium are compressed with the theoretical quantity either of a soluble permanganate or hypochlorite, or a trace of a nickel or copper salt. Oxygen is produced from these cubes in the cold by the action of water.—Mendel's law and the heredity of pigmentation in mice, by M. L. Cuenot. Up to the present all researches on Mendel's law have been carried out on plants, and it is not known whether this mode of heredity is met with in animals also. Experiments were therefore carried out with white and grey mice, and it was found that the progeny obtained by crossing these was invariably grey. The result of crossing with these grey mongrels was in complete accord with the theory.—On the structure and mode of multiplication of the flagellæ of the genus *Herpetomonas*, by M. Louis Leger.—On the *Daniellia* of Western Africa and on their resinous products, their relation with the *Hammout* or incense of the French Soudan, by M. Edouard Heckel.—On the seismic influence of the Armorican folds in the north-west of France and in the south of England, by M. F. de Montessus de Ballore.—On a new application of the principle of chrono-photography and on the construction of isonomal barometric charts, serving for the kinematographical study of the general movements of the atmosphere, by M. P. Garrigou-Lagrange. A series of charts showing the isobars over a given area at sufficiently short intervals of time may be regarded as instantaneous photographs representing the several phases of a movement. A series of charts issued by the Signal Office at Washington has been treated from this point of view, and a number of charts obtained which can be used in a hand kinematograph.

DIARY OF SOCIETIES.

THURSDAY, APRIL 17.

ROYAL INSTITUTION, at 3.—The Oxygen Group of Elements: Prof. J. Dewar, F.R.S.
 SOCIETY OF ARTS, at 4.30.—Recent Developments in Punjab Irrigation: Sidney Preston.
 LINNEAN SOCIETY, at 8.—The Anatomy of Todea with Notes on the Affinity and Geological History of the Osmundaceæ: A. C. Seward, F.R.S., and Miss Sybil O. Ford.—On the New Zealand Phyllobranchiate Crustacea, *Macrura*: G. M. Thomson.
 CHEMICAL SOCIETY, at 8.—Oxonium Salts of Fluoram and its Derivatives: J. T. Hewitt and J. H. Tervet.—The Influence of certain Acidic Oxides on the Specific Rotations of Lactic Acid and Potassium Lactate: G. G. Henderson and D. Prentice.—(1) The Amounts of Nitrogen as Ammonia and as Nitric Acid, and Chlorine in the Rain-water collected at Rothamsted; (2) The Amounts of Nitrogen as Nitrates and Chlorine in the Drainage through uncropped and unmanured land: N. H. J. Miller.

FRIDAY, APRIL 18.

ROYAL INSTITUTION, at 9.—The Autocur: Sir J. H. A. Macdonald.
 EPIDEMIOLOGICAL SOCIETY, at 8.30.—Smallpox Hospitals and the spread of Infection: Dr. Thresh.
 INSTITUTION OF CIVIL ENGINEERS, at 8.—The Erewash Valley Widening and Toton Sidings: H. C. M. Austen.
 INSTITUTION OF MECHANICAL ENGINEERS, at 8.—The Standardisation of Pipe Flanges and Flange Fittings: R. E. Atkinson.

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MONDAY, APRIL 21.

VICTORIA INSTITUTE, at 4.30.—Iceland, its History and Inhabitants: Dr. J. Stefansson.
 SOCIETY OF ARTS, at 8.—Glass for Optical Instruments: Dr. R. T. Glazebrook, F.R.S.

TUESDAY, APRIL 22.

ROYAL INSTITUTION, at 3.—Recent Methods and Results in Biological Inquiry: Dr. A. Macfadyen.
 INSTITUTION OF CIVIL ENGINEERS, at 8.—Discussion: Locomotive Fire-box Stays: F. W. Webb.

WEDNESDAY, APRIL 23.

INSTITUTION OF CIVIL ENGINEERS, at 8.—"James Forrest" Lecture: Metallurgy in Relation to Engineering: Sir W. C. Roberts-Austen, K.C.B., F.R.S.
 SOCIETY OF ARTS, at 8.—Opto-technics: Prof. Silvanus P. Thompson, F.R.S.

THURSDAY, APRIL 24.

ROYAL SOCIETY, at 4.30.—*Probable papers*.—On Skin-currents. Part III.—The Human Skin: Dr. A. D. Waller, F.R.S.—Antarctic Origin of the Tribe Schœnææ: C. B. Clarke, F.R.S.—A New Interpretation of the Gastric Organs of *Spirula Nautilus* and the Gastropods: J. E. S. Moore and W. B. Randles.
 ROYAL INSTITUTION, at 3.—The Oxygen Group of Elements: Prof. J. Dewar, F.R.S.
 INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Problems of Electric Railways: J. Swinburne and W. R. Cooper. (Adjourned discussion).—Form of Model General Conditions, for use in connection with Contracts for Plant, Mains, and Apparatus for Electricity Works. As drafted by a Committee.

FRIDAY, APRIL 25.

ROYAL INSTITUTION, at 9.—X-Rays and Localisation: Dr. J. Mackenzie Davidson.

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